

In the Claims:

Claims 1 - 15 (Canceled)

Claim 16 (New): A vacuum process system comprising:

a load port on which a plurality of objects to be processed are set;

a common transfer chamber disposed adjacent to the load port, having an internal space set in a substantially atmospheric pressure level, and including a first transfer device for transferring at least one of the objects into/from the load port, the first transfer device being disposed within the internal space;

a plurality of process and transfer means each comprising a combination of (i) a processing chamber for subjecting a predetermined process to an associated one of the objects, and (ii) a second transfer device for transferring said associated one of the objects into/from the process chamber, the process chamber and the second transfer device being arranged linearly in a direction substantially perpendicular to the common transfer chamber, the process and transfer means being individually provided with respect to the common transfer chamber, and arranged substantially parallel to each other; and

a control section for controlling the first and second transfer devices such that the first and second transfer devices transfer the objects in a direction where the process chamber and the second transfer device are arranged linearly with respect to the common transfer chamber.

Claim 17. (New): A vacuum process system according to claim 16, wherein the first transfer device is movable within the internal space of the common transfer chamber.

Claim 18. (New): A vacuum process system according claim 16, wherein the first transfer device is moved substantially in a longitudinal direction of the common transfer chamber.

Claim 19. (New): A vacuum process system according to claim 16, wherein the second transfer devices are disposed in respective vacuum transfer chambers which are respectively connected to the process chambers, and which are set at a predetermined vacuum pressure.

Claim 20. (New): A vacuum process system according to claim 19, wherein any adjacent two of the vacuum transfer chambers communicate with each other within a transfer container.

Claim 21. (New): A vacuum process system according to claim 19, wherein the vacuum transfer chambers include tables on which the objects are to be placed at a plurality of stages.

Claim 22. (New): A vacuum process system according to claim 16, wherein at least one extension transfer chamber is detachably connected to the common transfer chamber, and the first transfer device is movable between the common transfer chamber and the extension transfer chamber.

Claim 23. (New): A vacuum process system according to claim 22, wherein a third transfer device is movably provided in the extension transfer chamber, for transferring each of the objects between the load port and the second transfer device.

Claim 24. (New): A vacuum process system according to claim 23, wherein the third transfer device is movable between the common transfer chamber and the extension transfer chamber.

Claim 25. (New): A vacuum process system according to claim 19, wherein:
any adjacent two of the vacuum transfer chambers are connected to each other by an intermediate path chamber which is allowed to be set at a predetermined vacuum pressure;
openable/closable gate valves are provided between the intermediate path chamber and the vacuum transfer chambers; and
the control section controls the second transfer device of said each process and transfer means such that said each second transfer device transfers said associated one of the objects into/from the intermediate path chamber.

Claim 26. (New): A vacuum process system according to claim 25, wherein the control section controls the first and second transfer devices such that the objects are successively transferred to the process and transfer means via the intermediate path chamber.

Claim 27. (New): A vacuum process system according to claim 19, wherein the vacuum transfer chamber of said each process and transfer means comprises (i) a transfer chamber containing an associated one of the second transfer devices, disposed adjacent to an associated one of the process chambers, and continuously set at a predetermined vacuum pressure, and (ii) a load lock chamber for connecting an associated one of the transfer chambers and the common transfer chamber, the load lock chamber having an internal space which is allowed to be switchably set at one of an atmospheric pressure and a vacuum pressure.

Claim 28. (New): A vacuum pressure system according to claim 19, wherein the vacuum transfer chamber of said each process and transfer means comprises a load lock chamber for connecting an associated one of the process chambers and the common transfer chamber, the load lock chamber having an internal space which is allowed to be switchably set at one of an atmospheric pressure and a vacuum pressure.

Claim 29. (New): A vacuum pressure system according to claim 16, wherein the second transfer devices have support portions for supporting the objects, and the support portions are moved linearly to transfer the objects.

Claim 30. (New): A vacuum process system according to claim 19, wherein the vacuum transfer chamber of said each process and transfer means includes two buffers on which the object is placed in a standby state.

Claim 31. (New): A vacuum process system comprising:

a load port on which a plurality of objects to be processed are set;

a common transfer chamber disposed adjacent to the load port, and including an internal space set in a substantially atmospheric pressure level, and a transfer device disposed within the internal space, for transferring the objects into/from the load port; and

first and second process chambers each provided for subjecting the objects to a predetermined process; and

first and second transfer devices, provided in an internal space which is allowed to be vacuumized, and is located between the first and second process chambers and the common transfer chamber, for transferring the objects into/from the first and second process chambers,

wherein the first and second transfer devices transfer the objects in a direction substantially perpendicular to a longitudinal direction of the common transfer chamber, along transferring paths parallel to each other.